

**Algorithm** – a set of step-by-step directions for carrying out computation, such as addition, subtraction, multiplication, and division

**Example**

$$348 + 177 = ?$$

	100s	10s	1s
	3	4	8
+	1	7	7
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Add the 100s.  $300 + 100 \rightarrow$  4 0 0

Add the 10s.  $40 + 70 \rightarrow$  1 1 0

Add the 1s.  $8 + 7 \rightarrow$  1 5

Add the partial sums.  $400 + 110 + 15 \rightarrow$  5 2 5

$$348 + 177 = 525$$

**Attribute Blocks** – a set of blocks in which each block has one each of four attributes including color, size, thickness and shape



**Ballpark Estimate** – a rough estimate that’s “in the ballpark”; can serve as a check of reasonableness of an answer obtained through some other procedure, or it can be made when an exact value is unnecessary or is impossible to obtain



**“About how many people live in the U.S.?”**

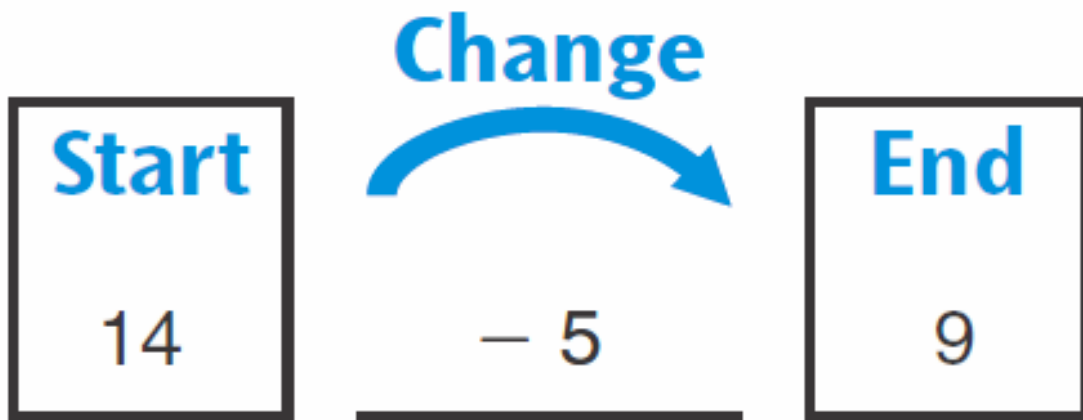
**“About 305 million!”**

**Centimeter (cm)** – a metric unit of length, equivalent to 10 millimeters,  $\frac{1}{10}$  of a decimeter, and  $\frac{1}{100}$  of a meter

**A centimeter is  
approximately the width  
of your pointer finger.**



**Change Diagram** – a diagram used to model situations in which quantities are either increased or decreased by addition or subtraction



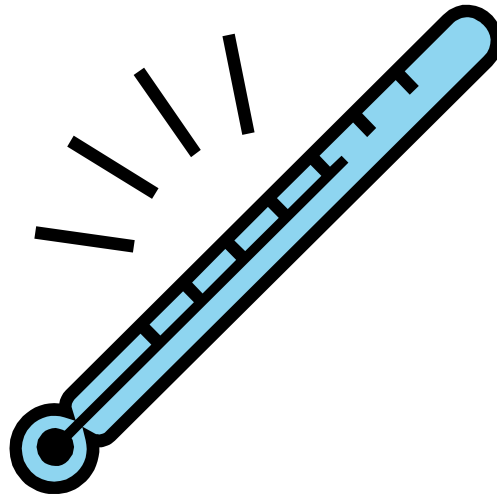
A change diagram for  $14 - 5 = 9$

**Change-to-more Number Story** – a story problem in which addition is used

**Abby had \$52. She earned \$15 raking leaves.  
How much money does Abby have now?**

$$\begin{array}{r} \$52 \\ +15 \\ \hline \$67 \end{array}$$

**Degree Marks** — markings on a thermometer that are used to measure temperature



**Degrees Celsius** — a temperature scale on which water freezes at  $0^{\circ}$  and boils at  $100^{\circ}$

$0^{\circ}$

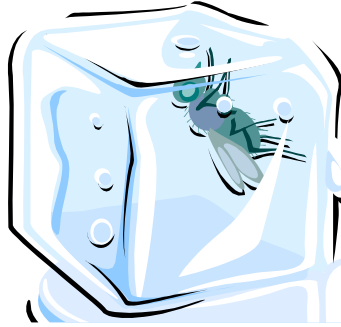


$100^{\circ}$



**Degrees Fahrenheit** – a temperature scale on which water freezes at  $32^{\circ}$  and boils at  $212^{\circ}$

$32^{\circ}$



$212^{\circ}$



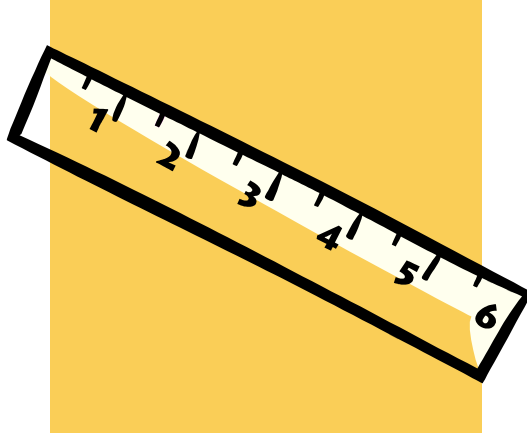
**Estimate** – an answer close to, or approximating, an exact answer



**About how much candy is in the jar?**

**About 20 pieces**

**Inch** – a U.S. customary unit of length equal to  $\frac{1}{12}$  of a foot

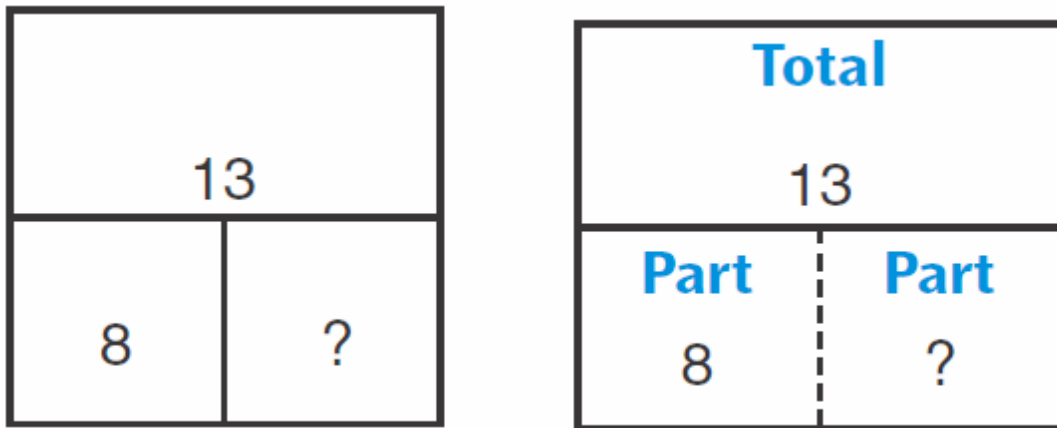


**Mental Arithmetic** – doing mathematics calculations in one's head, without pencil and paper



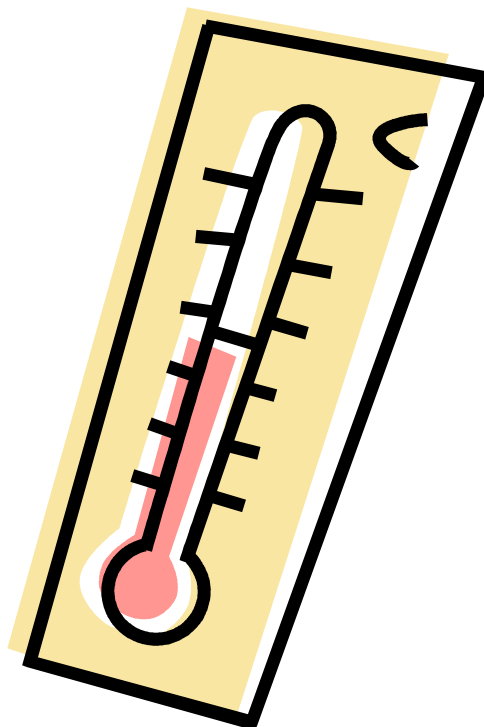
Let's see . . .  $6 + 6 = 12$ ,  
so  $6 + 7$  would be one  
more, so  $6 + 7 = 13$ !

**Parts and Total Diagram** – a diagram used to model problems in which two or more quantities (parts) are combined to get a total quantity



Parts-and-total diagrams for  $13 = 8 + ?$

**Thermometer** – a device used to measure temperature



**Tiling** – to cover a surface with shapes so that there are no gaps or overlaps

